

Rock Island County River Flooding and Public Health Concerns

The recent river flooding has created a multitude of problems for nearby residents including public health and environmental concerns. These issues include:

1) possible pollution of water wells, 2) malfunction of private sewage disposal systems, and 3) indoor air quality problems arising from mold which can develop within flood-damaged homes.

1) Pollution of water wells can occur whenever a well is under floodwaters. Contaminated flood water can enter through the well cap or vent and then drain into the groundwater below. Even if a person's own well is located above flood waters, neighboring wells that were under water can contaminate the same underground aquifer affecting many other wells. Recommendations:

- a) It is important for people to test their water supply for coliform bacteria and not assume that the water is immediately safe to drink. It is suggested that the water not be tested until about two weeks after the flood when contaminants have hopefully been pumped out of the ground. In the meantime, people should not use the water for drinking, cooking, or other ingestion purposes. Residents where wells have been submerged should be temporarily using bottled water until a satisfactory water test has been obtained.
- b) After the flood has subsided, property owners should pump water from the well onto the ground surface to flush out the system until the water looks relatively clear. If the well was under water, a shock chlorination needs to be done before the water can be tested. This is usually done with household bleach or swimming pool chlorination granules. Before chlorinating the well, you should consult with this Department, our website, or a qualified water well or pump contractor regarding proper methods and safety considerations. More detailed flood-related information is being released as a leaflet and on our website, which is listed at the end of this release.
- c) The Illinois Department of Public Health (IDPH) has advised us that they will offer free water sample analysis for residents with water wells located in flooded areas. Water sample test kits (containing a sterilized bottle and instructions) are available at our office for pick-up. An \$8 fee will be charged for shipping and handling.
- **d**) Property owners whose drilled wells were submerged by floodwaters are encouraged to extend their well casing at least two (2) feet above the maximum flood level. This will prevent floodwaters from directly entering the well in the future. Licensed water well

and pump contractors are qualified to do this type of work. We can provide a list of these contractors.

2) Private sewage disposal systems are used in most of the flooded areas and can either be septic systems or aerated treatment systems. Both types of systems may be failing, creating sewage back-ups or improperly discharging wastewater onto the ground or into the river. A septic system may only temporarily be out of service until flood waters and high groundwater levels have abated.

Recommendations:

- a) **Pumping the septic tank** may restore service.
- **b**) With aerobic treatment units, the servicing **dealer needs to be contacted** to assess damage and restore proper operation.

3) As most people are aware, **personal possessions and building materials are subject to contamination**, **damage**, **or destruction if in contact with floodwaters**. It is essential that these materials be removed, cleaned, dried, or restored within a couple of days in most cases or mold can become a major concern.

Recommendations:

- a) People performing cleaning or removal of moldy or water-damaged materials should wear an N-95 or HEPA filter facemask to minimize exposure to mold spores, particulates, and inhalable debris. Disposable N-95 or HEPA filter facemasks can be purchased for a minor cost at hardware stores and home improvement centers.
- b) The ability to salvage certain items depends on the type of material that was saturated. A number of restoration companies are available for hire. If immediate steps are not taken, items will not be salvageable and indoor air quality problems can occur from the production of mold. The heating and ventilation system in a home can be a source of mold or distribute it throughout the home. The presence of mold can lead to later health-related conditions, which can be difficult to diagnose and correct later. While this Department can be contacted for general advice and a list of restoration contractors, the following agencies have websites which have information on mold:
- Illinois Department of Public Health: <u>www.idph.state.il.us</u> Refer to "Topics A-Z" and click on "M" for mold publications.
- U.S. E.P.A.: <u>www.epa.gov/iaq/molds/moldguide.html</u>
- Centers for Disease Control: <u>www.cdc.gov/mold/dampnessfacts.htm</u>

For any questions of our Department or for copies of our leaflet, contact the Rock Island County Health Department, Division of Environmental Health, at **309-558-2840**.

For complete information on flood remediation and precautions, contact our website at <u>www.richd.org</u>. On our website you may click on the following links:

• "Precautions for Flooded Areas"— our summary of precautions

- "After the Flood"— a more detailed discussion of flood precautions from the Illinois Dept. of Public Health.
- "Illinois Dept. of Public Health Flood Information"— a complete listing of flood information subjects and resources with fact sheets and additional links.
- "Mask Recommendation"— use of the N-95 facemask.